

FORM PTO-1449
(REV. 7-80)

SEP 02 2003

U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
290097.402D1APPLICATION NO.
10/606,644

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Michael W. Reed et al.

FILING DATE

June 25, 2003

GROUP ART UNIT

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-------------------|-------|----------|-------------------------------|
| <i>R</i> | AA | 2,264,303 | 12/02/41 | Dickey | 260 | 205 | |
| | AB | 3,970,617 | 07/20/94 | Bruno | 260 | 152 | |
| | AC | 4,358,535 | 11/09/82 | Falkow et al. | 435 | 5 | |
| | AD | 4,868,105 | 09/19/89 | Urdea et al. | 435 | 6 | |
| | AE | 4,954,630 | 09/04/90 | Klein et al. | 544 | 102 | |
| | AF | 5,124,246 | 06/23/92 | Urdea et al. | 435 | 6 | |
| | AG | 5,210,015 | 05/11/93 | Gelfand et al. | 435 | 6 | |
| | AH | 5,304,645 | 04/19/94 | Klein et al. | 544 | 10.2 | |
| <i>M</i> | AI | 5,326,679 | 07/05/94 | Yanagisawa et al. | 430 | 495 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | |
|----------|----|-----------------|----------|---------|-------------|----|
| | | | | | YES | NO |
| <i>U</i> | AJ | WO 90/14353 | 11/29/90 | WIPO | | |
| | AK | WO 92/10588 | 06/25/92 | WIPO | | |
| | AL | WO 96/17957 | 06/13/96 | WIPO | | |
| | AM | WO 97/39008 | 10/23/97 | WIPO | | |
| <i>U</i> | AN | WO 99/40226 | 08/12/99 | WIPO | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|----------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>R</i> | AO | "98 Catalogue", 1998 Amersham Pharmacia Biotech S-Hertogenbosch, Netherlands, pg. 127, FluoroBlue. |
| | AP | Asanuma et al., "Photo-Responsive Oligonucleotides Carrying Azobenzene in the Side-Chains," <i>Tetrahedron Letters</i> 39: 9015-9018, 1998. |
| | AQ | Baker et al., "Fluorescent Reagents. Acyl Chlorides and Acyl Hydrazides," <i>Journal of the Chemical Society</i> , pg. 170-173, 1950. |
| <i>M</i> | AR | Bickett et al., "A High Throughput Fluorogenic Substrate for Stromelysin (MMP-3)," <i>Annals of the New York Academy of Science</i> 732: 351-355, 1994. |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

| | | | |
|------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------|-------------------------------|
| FORM PTO-147 (REV. 7-80) | SEP 02 2003 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 290097.402D1 | APPLICATION NO. 10/606,644 |
| INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | APPLICANTS Michael W. Reed et al. | |
| | | FILING DATE June 25, 2003 | GROUP ART UNIT |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|--------------------|-------|----------|-------------------------------|
| q | BA | 5,328,824 | 07/12/94 | Ward et al. | 435 | 6 | |
| | BB | 5,451,463 | 09/19/95 | Nelson et al. | 428 | 402 | |
| | BC | 5,455,157 | 10/03/95 | Hinzpeter et al. | 435 | 6 | |
| | BD | 5,492,806 | 02/20/96 | Drmanac et al. | 435 | 5 | |
| | BE | 5,502,177 | 03/26/96 | Matteucci et al. | 536 | 26.6 | |
| | BF | 5,512,667 | 04/30/96 | Reed et al. | 536 | 24.31 | |
| | BG | 5,525,464 | 06/11/96 | Drmanac et al. | 435 | 6 | |
| | BH | 5,556,752 | 09/17/96 | Lockhart et al. | 435 | 6 | |
| M | BI | 5,696,251 | 12/09/97 | Arnold, Jr. et al. | 536 | 23.1 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | |
|---|----|-----------------|----------|---------|-------------|----|
| | | | | | YES | NO |
| q | BJ | WO 99/51621 | 10/14/99 | WIPO | | |
| 1 | BK | WO 00/06771 | 02/10/00 | WIPO | | |
| u | BL | WO 00/70685 | 11/23/00 | WIPO | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| M | BM | Boger et al., "Studies on the Total Synthesis of CC-1065: Preparation of a Synthetic Simplified 3-Carbamoyl-1,2-dihydro-3H-pyrrolo[3,2-e]indole Dimer/Trimer/Tetramer (CDPI Dimer/Trimer/Tetramer)...," <i>J. Org. Chem.</i> 52: 1521-1530, 1987. |
| | BN | Bolli et al., "Watson-Crick base-pairing properties of bicyclo-DNA," <i>Nucleic Acids Research</i> 24(23): 4660-4667, 1996. |
| | BO | Cantor et al., "Oligonucleotide Interactions. III. Circular Dichroism Studies of the Conformation of Deoxyoligonucleotides," <i>Biopolymers</i> 9: 1059-1077, 1970. |
| | BP | Cardullo et al., "Detection of nucleic acid hybridization by nonradiative fluorescence resonance energy transfer," <i>Proc. Natl. Acad. Sci. USA</i> 85: 8790-8794, December 1988. |
| K | BQ | Demidov et al., "Kinetics and mechanism of polyamide ("peptide") nucleic acid binding to duplex DNA," <i>Proc. Natl. Acad. Sci. USA</i> 92: 2637-2641, March 1995. |

| | |
|--------------|-----------------|
| EXAMINER | DATE CONSIDERED |
| <i>Qu Li</i> | <i>7/2/05</i> |

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).



| | | | |
|------------------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|-------------------------------|
| FORM PTO-147 (REV. 7-80) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 290097.402D1 | APPLICATION NO. 10/606,644 |
| INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | APPLICANTS Michael W. Reed et al. | |
| | | FILING DATE June 25, 2003 | GROUP ART UNIT |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| U | CA | 5,801,155 | 09/01/98 | Kutyavin et al. | 514 | 44 | |
| | CB | 5,824,796 | 10/20/98 | Petrie et al. | 536 | 26.7 | |
| | CC | 5,830,653 | 11/03/98 | Froehler et al. | 435 | 6 | |
| | CD | 5,846,726 | 12/08/98 | Nadeau et al. | 435 | 6 | |
| | CE | 5,876,930 | 03/02/99 | Livak et al. | 435 | 6 | |
| | CF | 5,942,610 | 08/24/99 | Nelson et al. | 536 | 25.32 | |
| | CG | 5,952,202 | 09/14/99 | Aoyagi et al. | 435 | 91.2 | |
| Jh | CH | 6,007,992 | 12/28/99 | Lin et al. | 435 | 6 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION YES NO |
|--|--|-----------------|------|---------|-----------------------|
|--|--|-----------------|------|---------|-----------------------|

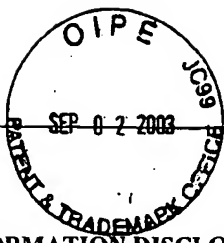
OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|----|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U | CI | Du et al., "PhotochemCAD: A Computer-Aided Design and Research Tool in Photochemistry," <i>Photochemistry and Photobiology</i> 68(2): 141-142, 1998. |
| | CJ | Eisen and Brown, "DNA Arrays for Analysis of Gene Expression," <i>Methods in Enzymology</i> 303: 179-205, 1999. |
| | CK | Forchiassin and Russo, "An Efficient Synthesis of <i>trans</i> -Hexahydrochroman-7-one," <i>J. Heterocyclic Chem.</i> 20: 493-494, March/April 1983. |
| | CL | Freifelder, D., <i>Physical Biochemistry</i> , Second Edition, Freeman & Co., New York, "Hybridization Between Single-Stranded Polynucleotides," pp. 700-712, 1982. |
| | CM | Gamper et al., "Facile preparation of nuclease resistant 3' modified oligodeoxynucleotides," <i>Nucleic Acids Research</i> 21(1): 145-150, 1993. |
| | CN | Gamper et al., "Modulation of C ^m /T, G/A, and G/T Triplex Stability by Conjugate Groups in the Presence and Absence of KCl," <i>Biochemistry</i> 36: 14816-14826, 1997. |
| | CO | Haugland, R.P., <i>Handbook of Fluorescent Probes and Research Chemicals</i> , Michelle Spence (ed.), 6 th Edition, Molecular Probes, Eugene, OR, "Substates for Miscellaneous Enzymes," Chapter 10.5, pp. 235-236, 1996. |
| Jh | CP | Hawthorne et al., "Evaluation of Some Fluorogenic Substrates for Continuous Assay of Aminopeptidase P," <i>Analytical Biochemistry</i> 253: 13-17, 1997. |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
290097.402D1APPLICATION NO.
10/606,644

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS
Michael W. Reed et al.FILING DATE
June 25, 2003

GROUP ART UNIT

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| h | DA | 6,028,183 | 02/22/00 | Lin et al. | 536 | 22.1 | |
| u | DB | 6,312,894 | 11/06/01 | Hedgpeth et al. | 435 | 6 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION YES NO |
|--|--|-----------------|------|---------|-----------------------|
|--|--|-----------------|------|---------|-----------------------|

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| h | DC | Hirshberg et al., "Crystal Structure of Phosphate Binding Protein Labeled with a Coumarin Fluorophore, a Probe for Inorganic Phosphate," <i>Biochemistry</i> 37: 10381-10385, 1998. |
| | DD | Holland et al., "Detection of specific polymerase chain reaction product by utilizing the 5' ? 3' exonuclease activity of <i>Thermus aquaticus</i> DNA polymerase," <i>Proc. Natl. Acad. Sci. USA</i> 88: 7276-7280, August 1991. |
| | DE | Huang et al., "X-ray and ¹ H NMR Studies of the Conformational Equilibria of 2-Z-3-Phenyl-1,3,2-oxazaphosphorinanes. Steric and Stereoelectronic Influences on the Unexpected Axial Preferences of Me ₂ N and MeNH Substituents on Three-Coordinate Phosphorus," <i>J. Org. Chem.</i> 58: 6235-6246, 1993. |
| | DF | Ibrahim et al., "The potential of 5' nuclease PCR for detecting a single-base polymorphism in <i>Orthopoxvirus</i> ," <i>Molecular and Cellular Probes</i> 11: 143-147, 1997. |
| | DG | Innis and Gelfand, <i>PCR Protocols: A Guide to Methods and Applications</i> , Academic Press, San Diego, Innis et al. (eds.), "Optimization of PCRs," Chapter 1, pp. 3-27, 1990. |
| | DH | Lee et al., "Allelic discrimination by nick-translation PCR with fluorogenic probes," <i>Nucleic Acid Research</i> 11(16): 3761-3766, August 11, 1993. |
| | DI | Li and Glazer, "Design, Synthesis, and Spectroscopic Properties of Peptide-Bridged Fluorescence Energy-Transfer Cassettes," <i>Bioconjugate Chem.</i> 10: 241-245, 1999. |
| | DJ | Livak et al., "Oligonucleotides with Fluorescent Dyes at Opposite Ends Provide a Quenched Probe System Useful for Detecting PCR Product and Nucleic Acid Hybridization," <i>PCR Methods and Applications</i> 4: 357-362, 1995. |
| | DK | Lukhtanov et al., "Direct, Solid Phase Assembly of Dihydropyrroloindole Peptides with Conjugated Oligonucleotides," <i>Bioconjugate Chem.</i> 7: 564-567, 1996. |
| u | DL | Matayoshi et al., "Novel Fluorogenic Substrates for Assaying Retroviral Proteases by Resonance Energy Transfer," <i>Science</i> 247: 954-958, February 23, 1990. |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).



| | | | |
|-----------------------------------------------------------------------|------------------------------------------------------------|--------------------------------------|-------------------------------|
| FORM PTO-1 (REV. 7-80) | U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE | ATTY. DOCKET NO. 290097.402D1 | APPLICATION NO. 10/606,644 |
| INFORMATION DISCLOSURE STATEMENT (Use several sheets if necessary) | | APPLICANTS Michael W. Reed et al. | |
| | | FILING DATE June 25, 2003 | GROUP ART UNIT |

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|-----------------|------|------|-------|----------|-------------------------------|
|----------------------|-----------------|------|------|-------|----------|-------------------------------|

FOREIGN PATENT DOCUMENTS

| DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION YES NO |
|-----------------|------|---------|-----------------------|
|-----------------|------|---------|-----------------------|

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| EA | Mayfield and Corey, "Automated Synthesis of Peptide Nucleic Acids and Peptide Nucleic Acid-Peptide Conjugates," <i>Analytical Biochemistry</i> 268: 401-404, 1999. |
| EB | Mayfield and Corey, "Enhancing Solid Phase Synthesis By a Noncovalent Protection Strategy-Efficient Coupling of Rhodamine to Resin-Bound Peptide Nucleic Acids," <i>Bioorganic & Medicinal Chemistry Letters</i> 9: 1419-1422, 1999. |
| EC | Milesi et al., "Synthesis of Oligonucleotide Conjugates in Anhydrous Dimethyl Sulfoxide," <i>Methods in Enzymology</i> 313: 164-173, 1999. |
| ED | Morrison, L.E., <i>Nonisotopic DNA Probe Techniques</i> , Kricka, L.J. (ed.), Academic Press, Inc., San Diego, "Detectoin of Energy Transfer and Fluorescence Quenching," Chapter 13, pp. 311-352, 1992. |
| EE | Nazarenko et al., "A closed tube format for amplification and detection of DNA based on energy transfer," <i>Nucleic Acids Research</i> 25(12): 2516-2521, 1997. |
| EF | Nielsen et al., "Sequence-Selective Recognition of DNA by Strand Displacement with a Thymine-Substituted Polyamide," <i>Science</i> 254: 1497-1500, December 6, 1991. |
| EG | Petrie et al., "An Improved CPG Support for the Synthesis of 3' -Amine-Tailed Oligonucleotides," <i>Bioconjugate Chem.</i> 3: 85-87, 1992. |
| EH | Pon and Yu, "Hydroquinone-O, O'-Diacetic acid ('Q-linker') as a replacement for succinyl and oxalyl linker arms in solid phase oligonucleotide synthesis," <i>Nucleic Acids Research</i> 25(18): 3629-3635, 1997. |
| EI | Reed et al., "Acridine- and Cholesterol-Derivatized Solid Supports for Improved Synthesis of 3'-Modified Oligonucleotides," <i>Bioconjugate Chem.</i> 2: 217-225, 1991. |
| EJ | Rothman and Still, "A New Generation of Fluorescent Chemosensors Demonstrate Improved Analyte Detection Sensitivity and Photobleaching Resistance," <i>Bioorganic & Medicinal Chemistry Letters</i> 9: 509-512, 1999. |
| EK | Seela et al., "8-AZA-7-Deazapurine DNA: Synthesis and Duplex Stability of Oligonucleotides Containing 7-Substituted Bases," <i>Nucleosides & Nucleotides</i> 18(6&7): 1399-1400, 1999. |

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|
| EXAMINER | DATE CONSIDERED 7/7/05 |
| * EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s). | |

FORM PTO-143
(REV.7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
290097.402D1APPLICATION NO.
10/606,644

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Michael W. Reed et al.

FILING DATE

June 25, 2003

GROUP ART UNIT

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|-----------------|------|------|-------|----------|-------------------------------|
|----------------------|-----------------|------|------|-------|----------|-------------------------------|

FOREIGN PATENT DOCUMENTS

| DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION |
|-----------------|------|---------|-------------|
| | | | YES NO |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Q | FA | Seela et al., "Parallel-Stranded DNA Formed by New Base Pairs Related to the Isoguanine-Cytosine or Isocytosine-Guanine Motifs," <i>Nucleosides & Nucleotides</i> 18(6&7): 1543-1548, 1999. |
| | FB | Seela and Zulauf, "Synthesis of oligonucleotides containing pyrazolo[3,4- <i>d</i>]-pyrimidines: The influence of 7-substituted 8-aza-7-deazaadenines on the duplex structure and stability," <i>J. Chem. Soc. Perkin Trans. 1</i> : 479-488, 1999. |
| | FC | Sokol et al., "Real time detection of DNA-RNA hybridization in living cells," <i>Proc. Natl. Acad. Sci.</i> 95: 11538-11543, September 1998. |
| | FD | Tyagi et al., "Multicolor molecular beacons for allele discrimination," <i>Nature Biotechnology</i> 16: 49-53, January 1998. |
| | FE | Uhlmann et al., "PNA: Synthetic Polyamide Nucleic Acids with Unusual Binding Properties," <i>Angew. Chem. Int. Ed.</i> 37: 2796-2823, 1998. |
| | FF | Van Ness and Chen, "The use of oligodeoxynucleotide probes in chaotrope-based hybridization solutions," <i>Nucleic Acids Research</i> 19(19): 5143-5151, 1991. |
| | FG | Whitcombe et al., "Detection of PCR products using self-probing amplicons and fluorescence," <i>Nature Biotechnology</i> 17: 804-807, August 1999. |
| | FH | White et al. "A Continuous Fluorometric Assay for Leukotriene D ₄ Hydrolase," <i>Analytical Biochemistry</i> 268: 245-251, 1999. |
| | FI | Wiegant et al., "Multiple and sensitive fluorescence in situ hybridization with rhodamine-, fluorescein-, and coumarin-labeled DNAs," <i>Cytogenet. Cell Genet.</i> 63: 73-76, 1993. |
| | FJ | Wittwer et al., "The LightCycler TM : A Microvolume Multisample Fluorimeter with Rapid Temperature Control," <i>BioTechniques</i> 22(1): 176-181, 1997. |
| U | FK | Young and Anderson, <i>Nucleic Acid Hybridisation</i> , Hames and Higgins (eds.), IRL Press, Oxford, England, "Quantitative Analysis of Solution Hybridisation," Chapter 3, pp. 47-111, 1985. |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-144
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
290097.402D1APPLICATION NO.
10/606,644

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Michael W. Reed et al.

FILING DATE

June 25, 2003

GROUP ART UNIT

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| 4 | GA | 6,531,581 B1 | 03/11/03 | Nardone et al. | 534 | 560 | |
| | GB | 6,485,901 B1 | 11/26/02 | Gildea et al. | 435 | 5 | |
| | GC | 6,465,644 B1 | 10/15/02 | Yan et al. | 544 | 99 | |
| | GD | 6,465,175 B2 | 10/15/02 | Horn et al. | 435 | 6 | |
| | GE | 6,448,407 B1 | 09/10/02 | Lee et al. | 546 | 283.1 | |
| | GF | 6,416,953 B1 | 07/09/02 | Heller | 435 | 6 | |
| | GG | 6,399,392 B1 | 06/04/02 | Haugland et al. | 436 | 172 | |
| | GH | 6,323,337 B1 | 11/27/01 | Singer et al. | 536 | 26.6 | |
| 4 | GI | 6,117,986 | 09/12/00 | Nardone et al. | 534 | 727 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | |
|---|----|-----------------|----------|---------------|-------------|----|
| | | | | | YES | NO |
| 4 | GJ | GB 1533121 | 11/22/78 | Great Britain | | |
| 4 | GK | GB 1394368 | 05/14/75 | Great Britain | | |
| 4 | GL | WO 99/64431 | 12/16/99 | WIPO | | |
| 4 | GM | WO 97/29154 | 08/14/97 | WIPO | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 4 | GN | Dawson, J.F., "The Structure and Properties of Disperse Dyes in Polyester Coloration," <i>JSDC</i> 99: 183-191, July/August 1983. |
| 4 | GO | Heesemann, J., "Studies of Monolayers. 1. Surface Tension and Absorption Spectroscopic Measurements of Monolayers of Surface-Active Azo and Stilbene Dyes," <i>Journal of the American Chemical Society</i> 102(7): 2167-2176, March 26, 1980. |
| 4 | GP | Keil, D. et al., "Preparation and UV/Vis Spectroscopic Characterization of <i>N,N</i> -Disubstituted 2-Amino-5-arylazoselenazoles and Some of Their Carbocyclic and Heterocyclic Analogues," <i>J. Prakt. Chem.</i> 342(2): 169-174, 2000. |

EXAMINER

DATE CONSIDERED

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).

FORM PTO-1449
(REV. 7-80)U.S. DEPARTMENT OF COMMERCE
PATENT AND TRADEMARK OFFICEATTY. DOCKET NO.
290097.402D1APPLICATION NO.
10/606,644

INFORMATION DISCLOSURE STATEMENT

(Use several sheets if necessary)

APPLICANTS

Michael W. Reed et al.

FILING DATE

June 25, 2003

GROUP ART UNIT

U.S. PATENT DOCUMENTS

| *EXAMINER INITIAL | | DOCUMENT NUMBER | DATE | NAME | CLASS | SUBCLASS | FILING DATE IF APPROPRIATE |
|----------------------|----|-----------------|----------|-----------------|-------|----------|-------------------------------|
| 4 | HA | 6,114,518 | 09/05/00 | Pitner et al. | 536 | 25.3 | |
| | HB | 5,272,259 | 12/21/93 | Claussen et al. | 534 | 689 | |
| u | HC | 3,407,189 | 10/22/68 | Merian | 260 | 207.1 | |

FOREIGN PATENT DOCUMENTS

| | | DOCUMENT NUMBER | DATE | COUNTRY | TRANSLATION | |
|--|----|-----------------|------|---------|-------------|----|
| | | | | | YES | NO |
| | HD | | | | | |
| | HE | | | | | |
| | HF | | | | | |
| | HG | | | | | |
| | HH | | | | | |
| | HI | | | | | |

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)

| | | |
|---|----|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| u | HJ | Lytle, M.H. et al., "Alternatives to FRET: Design of Fluorescence-quenched Oligonucleotide Probes with Extremely High Signal/Noise Ratios," BIOSIS Database, Accession No. 2001:519181. See also Poster Session from 12 th International Genome Sequencing and Analysis Conference, Miami Beach, FL, September 12-15, 2000. |
| u | HK | Sabnis, R. W. et al., "Synthesis and Application of 5-arylazothiophene Derivatives," <i>Bull. Chem. Soc. Jpn.</i> 64: 3768-3770, 1991. |
| u | HL | Sijm, D.T.H.M. et al., "Aqueous solubility, octanol solubility, and octanol/water partition coefficient of nine hydrophobic dyes," <i>Environmental Toxicology and Chemistry</i> 18(6): 1109-1117, 1999. |
| u | HM | Weaver and Shuttleworth, "Heterocyclic diazo componenets," <i>Dyes and Pigments</i> 3: 81-121, 1982. |
| | HN | |
| | HO | |

EXAMINER

DATE CONSIDERED

7/7/05

* EXAMINER: Initial if reference considered, whether or not criteria is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant(s).